PARONYCHIA HINTONIORUM (CARYOPHYLLACEAE), A NEW SPECIES FROM NUEVO LEON AND VERACRUZ, MEXICO

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ABSTRACT

Paronychia hintoniorum B.L. Turner spec. nov., is described and illustrated. It occurs in the states of Nuevo León and Veracruz, México, and is closely related to the widespread *P. mexicana*, and is well differentiated by both vegetative and floral characters. Distribution maps of the two species are provided.

KEY WORDS: Caryophyllaceae, *Paronychia*, systematics, México, Nuevo León, Veracruz

Routine identification of plants from northeastern México has revealed the following novelty.

PARONYCHIA HINTONIORUM B.L. Turner spec. nov. Figure 1. TYPE: MEXICO. Nuevo León: Mpio. Galeana, Rancho Aguililla, ca. 1900 m, 22 Jul 1995, Hinton et al. 25368 (HOLOTYPE: TEX!).

Paronychia hintoniorum B.L. Turner, *spec. nov.*; similis *P. mexicana* Hemsl. sed foliis oblanceolatis glabriusque, apicibus non spinulosis, et calycibus majoribus glabriusque.

Perennial sprawling or recumbent herbs from lignescent tap roots to 25 cm high, the stems simple, numerous and procumbent from the base of the plant, very sparsely puberulent to glabrous; stipules white-scarious, 3-4 mm long and as wide, acute to rounded apically. Leaves opposite throughout, gradually reduced upwards, those at midstem oblanceolate, 10-25 mm long, 3-7 mm wide, glabrous throughout, the apices obtuse to acute, not clearly apiculate or setose. Flowers axillary, few to numerous in fasciculate or subfasciculate offshoots or clusters. Calyces glabrous, 3.5-4.0 mm long; sepals united below for 1.5-2.0 mm, the lobes 1.5-2.0 mm long, white-marginate, 1-3 nervate, acute apically. Stamens 5, small, ca 1.5 mm long, united below into a scarious sheath. Ovary ca. 1.5 mm high, sparsely short-glandular apically, style ca. 0.3 mm long. Fruits and seeds not available.

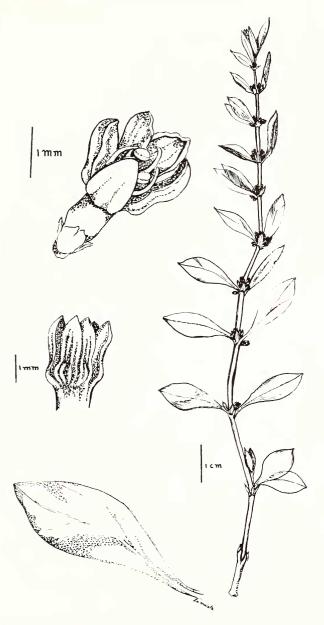


Figure 1. Paronychia hintoniorum, a single stem and flower from the holotype.





Figure 2. Distribution of *Paronychia mexicana* (open circles), and *P. hintoniorum* (closed circles).

ADDITIONAL COLLECTION EXAMINED: MEXICO. Veracruz: Mpio. de Perote, Totalco, "Orilla de camino", 2300 m, 7 Jul 1970, F. Ventura A. 1537 (LL,US).

Paronychia hintoniorum is clearly related to P. mexicana Hemsl. but is markedly different in leaf shape and vestiture (oblanceolate, glabrous, and acute to obtuse apically, vs. linear-lanceolate, markedly hirsute and apices spinulose, respectively), and larger glabrous calyces (3.5-4.0 mm long vs. 1.4-2.0 mm) having ribbed lobes (vs. nearly ribless and pubescent).

Both of the above cited collections occur along the periphery of the known range of *Paronychia mexicana* and because of their marked differences are unlikely to be but forms of the latter. I wrote to the Hinton family, upon whose rancho the type collection was made (*cf.* p. 31, this issue), asking them to examine populations at the type locality, especially to ascertain if it might not be weedy at this site. George Hinton, the grandson of the legendary México collector, George B. Hinton, responded:

I went back to the locality of the *Paronychia* and observed the following: it grows at the base of a limestone hill in colonies of *Agave lechuguilla*. In these colonies it grows with *Acacia* sp., *Acalypha monostachya*, *Bahia absinthifolia*, *Berberis trifoliolata*, *Dyschoriste schiedeana*, *Ephedra aspera*, *Flourensia cernua*, *Gymnosperma glutinosum*, *Loeselia caerulea*, *Mortonia palmeri*, *Opuntia phaeacantha*, *Yucca filifera*. Less frequently it grows as above with *A. striata* instead of *A. lechuguilla*. Its habit is procumbent although it frequently climbs up on the plants around it. The stems are about 0.25 m; the ones I sent you are much smaller because of the difficulty of getting your hand down to the base of the plant thru the *Agave*. I collected about 12 sheets, with several complete plants which I will send you when dry. It only grows in the agave patches, and these are strung for about 120 m. along the base of the hill. It doesn't appear to be a weed.

He also sent additional sterile material which matched that of previous collections.

I am aware of the wide geographical gap between the only two sites known for this species (Figure 2). The Veracruz specimens are, except for their somewhat smaller leaves and more floriferous condition, almost exactly like that of type material. Label data on Ventura's specimen report the plant as "crece en lugares despejados; abundantes". Veracruz populations of *Paronychia hintoniorum* are located near populational sites of *P. mexicana*, the latter readily recognized by the characters alluded to in the above account. It is perhaps tempting to believe that *P. hintoniorum* might be but a populational growth form of *P. mexicana*; if so, then these must rank as among the most remarkable populational segregates within a single species to my knowledge. In any case, comparable material was not detected elsewhere among the broad range of *P. mexicana* examined in this study. Indeed, Chaudhri (1968) recognized two subspecies under *P. mexicana*, one of these with two varieties. I examined type material of these taxa and all are essentially alike (except for variation in stamen number, a variable organ set as noted by Core [1943]). Apparently, Chaudhri did not examine material of what is here called *P. hintoniorum* or else he would have

surely dubbed this with a name, to judge from his annotations on a broad range of specimens at F, GH, LL, TEX, US.

It is a pleasure to name this taxon for the Hinton family, upon whose property the type locality occurs.

ACKNOWLEDGMENTS

I am grateful to Gayle Turner for the Latin diagnosis, and to Piero Delprete and Mark Mayfield for reviewing the paper. The drawing was executed by Marcia Thompson. Distributional maps (Figure 2) are based upon specimens at F, GH, LL, TEX, US.

LITERATURE CITED

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